NON-PUBLIC?: N
ACCESSION #: 9008280290
LICENSEE EVENT REPORT (LER)

FACILITY NAME: VOGTLE ELECTRIC GENERATING PLANT - UNIT 1 PAGE: 1 OF 3

DOCKET NUMBER: 05000424

TITLE: FAILED TRANSFORMER LEADS TO MAIN FEEDPUMP TRIP AND REACTOR TRIP
EVENT DATE: 07/23/90 LER #: 90-016-00 REPORT DATE: 08/21/90

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION:
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: R. M. ODOM, NUCLEAR SAFETY AND COMPLIANCE

TELEPHONE: (404) 826-3201

COMPONENT FAILURE DESCRIPTION:
CAUSE: SYSTEM: COMPONENT: MANUFACTURER:
REPORTABLE NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On 7-23-90 at 0600 CDT, Unit 1 was operating in Mode 1 at 100% power when a 4160/480 volt non-1E transformer (1NB01) experienced an internal fault, causing a trip of the associated feeder breaker. This transformer was supplying power to the speed control circuitry for both of the Main Feedwater Pump (MFP) turbines. The MFPs tripped, the Steam Generator (SG) water levels decreased to 24%, narrow range level, and the reactor operator initiated a manual reactor trip at 0602 CDT. The Main Feedwater System isolated and the motor-driven Auxiliary Feedwater (AFW) pumps started, as expected, when the react
r trip occurred. The turbine driven
AFW pump started when two of the four SG's reached their low-low level setpoint. Normal plant conditions were established in Mode 3 (Hot

Standby) at 0656 CDT.

The cause of the event was an internal fault in the 1NB01 transformer. Further investigation of the cause of the fault is in progress.

END OF ABSTRACT

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) because an unplanned actuation of the Reactor Protection System (RPS) occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 1 was operating in Mode 1 (power operation) at 100% of rated thermal power. Other than that described herein, there was no inoperable equipment that contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On 7-23-90 at 0600 CDT, a 4160/480 volt non-1E transformer (1NB01) experienced an internal fault, causing a trip of the associated feeder breaker. This transformer was supplying power to the speed control circuitry for both Main Feedwater Pump (MFP) turbines. The MFPs tripped and the Steam Generator (SG) water levels decreased to 24%, narrow range level, and the reactor operator initiated a manual reactor trip at 0602 CDT. The Main Feedwater System isolated and the motor-driven Auxiliary Feedwater (AFW) pumps started, as expected, when the reactor trip occurred. The turbine driven AFW pump started when two of the four SG's reached their low-low level setpoint. At 0608 CDT, operators shut the main steam isolation valves in order to maintain Reactor Coolant System temperature. At 0655 CDT, diesel generator IA was declared inoperable due to a loss of power to its keep warm system. Normal plant conditions were established in Mode 3 (Hot Standby) at 0656 CDT.

D. CAUSE OF EVENT

The cause of the event was an internal fault in the 1NB01 transformer. Further investigation of the cause of the fault is in progress.

E. ANALYSIS OF EVENT

The loss of the 4160/480 volt non-1E transformer resulted in a condition that led to a manual reactor trip. The Main Feedwater System isolated and the AFW System actuated as expected and operators acted to stabilize plant conditions. Based on these considerations, there was no adverse effect on plant safety or the health and safety of the public as a result of this event.

F. CORRECTIVE ACTIONS

1. The failed transformer was replaced.

2. A failure analysis is in progress to determine the cause of the transformer's internal fault. Results are expected to be available by 10-31-90 and further actions may be identified.

3. Based on similar past failures of this type transformer, a program was begun to install surge arrestors. This long range program will be carried out over several refueling outages.

G. ADDITIONAL INFORMATION

1. Failed Components:

4160/480 volt transformer manufactured by General Electric Class AA/PA, 1000/1333 KVA rated.

2. Previous Similar Events:

None.

3. Energy Industry Identification System Code:

Reactor Coolant System - AB
Main Feedwater System - SJ
Auxiliary Feedwater System BA
Main Steam System - SB
Reactor Protection System - AA
Diesel Generator System - EK
4160 Volt Non-1E Power System - EA
480 Volt Non-1E Power System - EC

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the southern electric system

August 21, 1990

W. G. Hairston, III
Senior Vice President
Nuclear Operations

ELV-02030
0819

Docket No. 50-424

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT
FAILED TRANSFORMER LEADS TO
MAIN FEEDPUMP TRIP AND REACTOR TRIP

In accordance with 10 CFR 50.73 (a)(2)(iv), Georgia Power Company hereby submits the enclosed report for a reactor trip which occurred on July 23, 1990.

Sincerely,

W. G. Hairston, III

WGH,III/PAH/cr

Enclosure: LER 50-424/1990-016

xc: Georgia Power Company
Mr. C. K. McCoy
Mr. G. Bockhold, Jr.
Mr. R. M. Odom
Mr. P. D. Rushton
NORMS

U. S. Nuclear Regulatory Commission
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